

ABSTRACT OF THE INVENTION

An improved multi-layer optical filter arrangement having spatially and spectrally differential reflection characteristics on one side and substantially uniform transmission characteristics over a band of at least 250 nm in the optical spectrum is provided. The filter arrangement includes two optical thin film stacks disposed on the surface of a substrate in a side by side relationship. Each of the thin film stacks includes two metal layers and a dielectric layer interposed between the two metal layers. At least one of the stacks includes an additional dielectric layer deposited thereon. In addition, one or more matching dielectric layers may be interposed between the substrate and first metal layer of each of the stacks to reduce reverse reflection of the filter arrangement. A semi-continuous process for producing the filter arrangements on flexible films is also included.